

# EXECUTIVE SUMMARY

DESTINATION 2030 is the 2004 Regional Transportation Plan (RTP) for the six county Region in Southern California including Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial — home to 17 million people. The Regional Transportation Plan (RTP) is the culmination of a three-year effort with a focus on improving the balance between land use and the current as well as future transportation systems. The Southern California Association of Governments (SCAG) is required to develop, maintain and update the RTP on a three year cycle.

DESTINATION 2030 is a multi-modal Plan representing our vision for a better transportation system, integrated with the best possible growth pattern for the Region over the Plan horizon of 2030. The Plan provides the basic policy and program framework for long term investment in our vast regional transportation system in a coordinated, cooperative and continuous manner. Transportation investments in the SCAG Region that receive State or federal transportation funds must be consistent with the RTP and must be included in the Regional Transportation Improvement Program (RTIP) when ready for funding.

## *A New Destination*

Since the adoption of the 2001 RTP in April of 2001, there have been several new developments in the Region that must be reflected in the updated RTP; some are positive and some are not. On the positive side, several new initiatives proposed in the 2001 RTP have come to fruition, including passage of Proposition 42 (which dedicates revenues generated from the gasoline sales tax for transportation purposes) and the extension of the half-cent sales tax measure in Riverside County. A 20-mile segment of the 28.2-mile State Route 210 extension, a major addition to our freeway system, became operational. The new Metro Gold Line began light rail service between downtown Los Angeles and Pasadena. Because rapid bus corridors proved to be highly effective, the implementation of several new corridors was expedited in Los Angeles County.

On the negative side, the State budget crisis, which became evident after the 2001 RTP, has directly threatened funds designated for the Traffic Congestion Relief Program (TCRP). This has not only jeopardized the timely implementation of critical transportation projects, but also has required SCAG to take a fresh look at its regional priorities and take a more proactive role in securing future funding needs. Also, the events of September 11, 2001 (9/11), have severely impacted transportation planning, especially in the arena of aviation.

In the process of updating the 2001 RTP, SCAG found that by changing the distribution of growth within the Region for future years, there were dramatic effects on the performance of the transportation system. In fact, by reducing population and employment estimates by 1 million, along with a reallocation of jobs to Los Angeles County from elsewhere in the Region, analysis showed dramatic improvements in air quality as well as mobility. As a result, SCAG



initiated a comprehensive growth visioning process called Southern California *COMPASS*, an innovative effort to develop broad consensus on growth and land-use issues affecting the future of the Region. This led to the development of a growth vision for the Region that best fits the existing and proposed regional transportation infrastructure, while respecting natural as well as policy constraints that are inherent in the Region. A notable feature of the growth visioning effort has been to engage the public in transportation planning in an interactive process to arrive at a shared conception of the Region's future.

In order to develop this vision and meet all the challenges the Region faces in a comprehensive and coordinated manner, SCAG developed an integrated planning process called Planning for Integrated Land-Use and Transportation (PILUT) to update the 2004 RTP. The idea was to integrate the transportation planning, growth visioning, and State-required Environmental Impact Report (EIR) analysis into a single, unified process. This integration helped eliminate redundancy, ensure close coordination, and optimize the use of SCAG's limited planning resources.

Based on extensive public input, in May 2003, SCAG's Community, Economic and Human Development Committee directed staff to evaluate five growth scenarios. Three of the five scenarios involve technical adjustments to projections based on local input and other considerations. The other two scenarios, called PILUT I and PILUT II, represent major policy shifts that would include much closer integration of land-use plans with transportation investments, while remaining consistent with the general plans of the many jurisdictions within the SCAG Region.

PILUT I proposes intensification of land-use in urbanized parts of the Region to accommodate future growth so that more of our scarce undeveloped land is preserved at the same time the existing transportation system is utilized more effectively, particularly our public transit system.

PILUT II proposes accommodating future growth by encouraging the movement of people and jobs to outlying areas such as north Los Angeles and San Bernardino Counties, and eastern Riverside County (Coachella Valley) so that we can achieve better balance between jobs and housing and minimize the need for long commute trips.

The result of this visioning process is a hybrid growth scenario that incorporates elements of PILUT I and II based on a set of principles developed by the Growth Visioning subcommittee. Accordingly, the proposed growth vision has been developed as follows: utilizing infill where appropriate to revitalize underutilized development sites; focusing growth along transit corridors and nodes; providing housing opportunities near major job centers; providing housing opportunities to match changing demographics; preserving natural open space; incorporating the decentralized aviation strategy proposed in the Plan; densifying new transportation corridors proposed in the Plan; and respecting the local input and feedback process in the development of the growth distribution.



## ■ Goals, Policies and Performance Measures

DESTINATION 2030 is a performance-based transportation plan, as were the 2001 RTP and the 1998 RTP. The goals of the Plan, as summarized in Chapter 3, are to maximize mobility and accessibility, ensure safety and reliability, preserve our transportation system, maximize productivity of our system, protect the environment and encourage land-use and growth patterns that complement our transportation system. The associated policies were developed to guide the development of the 2004 RTP further and reflect the transportation priorities of the Region. Performance measures described in Chapter 3 were developed to ensure that the adopted goals are achieved through the implementation of the 2004 RTP.

## *Our Challenges*

Our challenges relative to developing a sound transportation plan can be broadly divided into three categories: 1) addressing growth in population, employment and households; 2) preserving, expanding and wisely utilizing our infrastructure; and 3) funding our Plan.

If recent population, household, and employment trends continue in the future, by 2030 the Region will be home to 22.9 million residents and 10.2 million jobs. This represents a population increase of 38 percent, or 6.3 million people, between 2000 and 2030 and an increase in employment of 36 percent, or 2.7 million jobs. This forecast is slightly different from the regional growth presented in the 2001 Regional Transportation Plan in that both household and population growth are expected to be less than previously forecast.

## ■ Unprecedented Demand on Our System

Each major mode in our transportation system faces challenges meeting the growth that is coming our way. While population more than doubled from 1960 to 2000, our freeway capacity increased by less than 30 percent. Consequently, our Region's congestion has increased dramatically, affecting both person travel and goods movement. For year 2000, total daily delay due to congestion is estimated to be 2.2 million person hours. If current trends persist, this delay is expected to more than double to 5.2 million person hours of daily delay by 2030. Moreover, our infrastructure is aging and requires more investment in maintenance and preservation.

Both industry and residents are served by a vast transportation network that includes over 9,000 lane miles of freeway, more than 42,000 lane miles of arterials, several large public transit systems, four major airports (including the world's fifth largest), as well as by the two largest cargo-handling ports in the United States, which combined constitute the third-largest port complex in the world. Yet the Region's transportation system has not kept up with population and transportation demand.



The Region has invested heavily in transit in the past thirty years and yet the transit ridership has not increased proportionately. It is evident that transit service utilization in the Region is not optimal compared to similar regions in the nation as described in Chapter 2.

## ■ Crisis in Transporting Goods

The Southern California region is facing a crisis in transporting goods, characterized by a dramatic growth in rail and truck traffic, scarce financial resources, and the high costs of infrastructure improvements. Forecasts of greater regional population and employment, and projections of increasing international and domestic trade volumes, all lead to worsening congestion and the potential of gridlock occurring within the Region's surface transportation system. Almost all of the short-haul and significant share of medium- and long-haul movement of goods occurs by truck. Severe congestion due to truck traffic is expected to worsen in the Region's major transportation corridors.

Airports play an important role in goods movement, as air cargo is transported in either passenger aircraft belly-holds or in dedicated freight aircraft used primarily for high-value, time-sensitive shipments. In 2002, the Region's airports handled 2.6 million tons of air cargo. Regional air cargo has grown at an average annual rate of 6.6 percent since 1965. Los Angeles International and Ontario International are the major cargo-handling airports, transporting about 96 percent of all regional air cargo, with LAX alone accounting for 75 percent of the traffic. Ontario air cargo traffic has increased seven-fold since 1979, while LAX has doubled the amount of air cargo handled in the same period. Burbank, John Wayne and Long Beach handle substantially less cargo.

## ■ Passenger Aviation

The SCAG Region has 57 public use airports, including six commercial service airports, 45 general aviation, two recently closed military air bases (one certified as a commercial service airport), two commuter airports and two joint-use facilities.

In all, some 78 million annual passengers (MAP) were served in the Region in 2002, almost double the number served in 1980. The level of air passenger demand is forecast to double again before 2030. While none of the individual airports is the largest in the U.S., the Region's airports taken together make Southern California the busiest of all regions in the country.

The need to accommodate future growth is clear and the economic costs of doing nothing are substantial. For every one million regional air passengers, it is estimated that there is a positive regional economic impact of \$620 million (in 1998 dollars) and 4,475 jobs. In addition, the number of jobs created by air cargo and freight movement in the region is enormous and vital to the overall health of the regional economy.



## ■ Running Out of Financial Options

The baseline revenue estimate for the six-county SCAG Region is \$120 billion over the 29-year time horizon of the 2004 RTP. Local sources comprise 75 percent of the overall revenue forecast, with State sources totaling 15 percent and federal sources making up 10 percent. On the other hand, the Region's total committed costs to maintain and operate the system as well as complete projects already committed, add up to \$115 billion. The remaining balance provides a very small cushion with which to pursue transportation improvements critical to maintaining the Region's mobility and accommodating future growth.

## OUR PLAN

Given the challenges we face, the SCAG RTP relies on a number of strategies to address the Region's transportation needs. These include an increased focus on operational, management and preservation strategies; land-use integration with transportation investments; strategic system expansion investments; and innovative financing mechanisms. This comprehensive approach is referred to as System Management.

## ■ Preservation – Protecting Our Infrastructure

A key aspect of System Management is protecting our investment in the current transportation infrastructure. The Region has invested billions of dollars in developing its multi-modal transportation system and must protect these investments for current and future generations. The Plan proposes setting aside \$6.5 billion in additional funding for infrastructure preservation.

## ■ Operational Strategies – Getting the Most Out of Our Existing System

In addition to preserving the system, the Region has a responsibility to get the most out of the current system. This is especially true for the State Highway System, which loses a significant part of its productivity during extreme congestion due to weaving, merging, accidents, and other factors. Small physical improvements (e.g., auxiliary lanes that extend the merging range) and technology deployments (e.g., advanced ramp metering) offer us affordable solutions to restore some of this lost productivity. These technology deployments are often referred to as Intelligent Transportation Systems, or ITS. The combination of operations-related investments reduces delays and the duration of congestion, and improves safety and the predictability of travel time. The Plan proposes an increase of \$2.3 billion for operational strategies that improve the productivity of the multimodal transportation system through 2030. This level of funding represents less than one percent of the overall RTP expenditures, but is expected to produce benefits that are almost an order of magnitude higher.

## ■ Transportation Demand Management

Transportation Demand Management (TDM) is the all-inclusive term given to a variety of measures used to improve the efficiency of the existing transportation system by managing travel demand. An Individual's travel behavior may be influenced by mode, reliability, frequency, route, time and costs, support programs/facilities, perceived personal security and safety, and education.

TDM strategies that encourage the use of alternative modes of transportation to the single occupant vehicle include rideshare (carpools and vanpools), transit (bus and rail), and non-motorized modes (bicycles and walking). The Plan includes \$1.25 billion in TDM investments through 2030.

## ■ Strategic System Expansion / Capital Investments

DESTINATION 2030 is a multi-modal Plan which proposes a balanced investment in all of the Region's modes so that the system performs at the highest level possible.

## ■ Highways and Arterials

The 2004 RTP contains approximately \$13 billion in highway and arterial improvement projects in addition to already-committed or programmed projects. A summary of expenditure by each category is provided in the following table.

**Table 1**

### **Highway & Arterial Improvements** (in addition to Baseline & Tier 2)

<b>Improvement Category</b>	<b>Investment (in billions)</b>
HOV	\$2.3
Mixed Flow	\$4.0
Arterial	\$5.9
Corridors	\$0.9
<b>Total</b>	<b>\$13.1</b>

The Plan also proposes a number of high occupancy toll (HOT) lane facilities, including a capacity enhancement parallel to SR-91 to address east-west congestion in the Riverside County area. While additional work is in progress through the Community and Environmental Transportation Acceptability Process (CETAP) to identify and study the feasibility of specific alignments in this corridor, this Plan acknowledges the need for additional capacity in this corridor. Specific mode and project definition will also build on the Major Investment Study (MIS) recently initiated by the Orange County Transportation Authority (OCTA). Any corridor

improvements are primarily anticipated to be implemented with user-fee-backed funding mechanisms.

Arterial roads account for over 90 percent of the total road network and already carry over 50 percent of total traffic. As it becomes more difficult to add lanes to existing freeways or build new freeways, maximizing the potential capacity of arterials becomes an attractive option to increasing overall system capacity in already-developed areas. The Strategic Arterial Improvement concept could involve a combination of widening, signal prioritization and other Intelligent Transportation Systems (ITS) deployment and grade separation at critical high-volume intersections to enhance the flow speed and capacity of the arterial. In addition to the specific arterial improvements identified under the Smart Street Improvement Program, this Plan proposes a significant increase in funding for arterial improvements and capacity enhancements.

## ■ Public Transportation System

The goals of public transportation services are to ensure mobility for people without access for automobiles and to provide attractive alternatives for drive-alone motorists or discretionary riders. Strategies include a significant increase in service availability, major expansion in the use of bus rapid transit (BRT) and some restructuring of services to ensure efficient utilization of available capacity. The Plan invests an additional \$5.5 billion in local bus service, including service for the elderly and disabled, as well as bus stops and transit centers. The Plan also includes an additional \$3 billion in new transit corridors, including new light and heavy rail lines.

### Bus Rapid Transit

Bus rapid transit is designed to provide fast, high-quality bus service, operating in mixed traffic or in dedicated guide-ways, utilizing low-floor buses, taking advantage of signal priority at intersections, boarding and alighting passengers through streamlined processes, and improving bus stop spacing at planned stations. BRT combines the flexibility of bus systems with some of the features of rail transit. It uses specially identified buses stopping only at major intersections/destinations.

### Metrolink Commuter Rail

Metrolink is the regional commuter rail service that operates in six Southern California counties. Southern California Regional Rail Authority (SCRRA) provides and maintains Metrolink services and facilities. The Metrolink system consists of 53 stations, with one in San Diego County. It carries over 36,000 passenger trips and operates 143 train trips per weekday. The Plan invests an additional \$1.8 billion towards long-range capital improvements that will, when fully implemented, effectively double the Metrolink System's passenger-carrying capacity. The long-range capital plan includes selective double tracking on critical route segments, switching and signal improvements, communication system improvements, new rolling stock, rolling stock storage/maintenance facilities, new stations and enhancements to existing stations. Plans also include future service expansion on the Redlands and San Jacinto branch lines.





### **Land-Use – Transit Coordination**

The regional transit program calls for increased and better coordination between transit and land-use planning. The Region must develop and adopt a long-term strategy for integrating the planning of commercial, residential and recreational land-uses with the transportation system as well as increasing land-use intensities in areas with frequent transit services and good access. This integration would complement and maximize the use of the Region's transit system resulting in increased ridership, reduced congestion, and improved air quality.

### **Transit-Oriented Development**

The regional transit program calls for the local and regional transit and planning agencies to promote transit-oriented developments (TOD) cooperatively along the major transit corridors. Transit-oriented development is a land-use planning tool that promotes pedestrian-friendly environments and supports transit use. It improves transit accessibility, promotes compact land patterns, walkable environments, and reduced auto use.

### **Transit Centers**

A network of transit-based centers and corridors, supported by infill development, maximizes the use of existing infrastructure, supports transit ridership, reduces air pollution and preserves green space and undeveloped areas.

To encourage the use of transit and ridesharing further, new transit centers and park-and-ride facilities will be constructed in areas that provide access to the freeway HOV network, transit corridors and express buses. Existing transit centers can be upgraded for multi-modal uses that support restructured transit services.

## **■ Goods Movement Strategies**

The SCAG model projects an increase of over 110 percent in truck vehicle miles traveled (VMT) by 2030. Other sources estimate the growth to be more than 200 percent by that time. Regional strategies to address these capacity needs are discussed below.

### **Roadway Improvements to Address Truck Demand**

One strategy focuses on the concept of adding capacity to a corridor that has a high share of truck traffic. SCAG envisions working with local and subregional representatives to expand corridors along alignments extending from the San Pedro Bay ports, through the East-West Corridor and out to strategic distribution points northeast or southwest of urbanized areas. The Plan allocates a total of \$16.5 billion in funding for these improvements. Given the financial constraints in the Region, the development of this strategy is proceeding with the assumption that all capital construction and yearly operating costs associated with this system must be supported through the collection of user fees.





### Regional Rail Capacity Improvement Program

The regional rail capacity improvement program recommended by SCAG would be financed with a revenue stream raised on corridor traffic hauled by the Union Pacific and Burlington Northern Santa Fe Railroads. It is also recommended that discussions take place with other West Coast ports regarding a similar revenue approach to minimize any potential for cargo diversion.

In order to collect and distribute funds throughout the corridor for eligible capital improvement projects, it is envisioned in concept that SCAG create a subsidiary agency. The role of this agency, here referred to as the Southern California Railroad Infrastructure Financing Authority (SCRIFA), would be limited to issuing and servicing debt, administering the revenue collection process, and distributing money for approved projects to the railroads and other implementing agencies. Similar agencies should be created for administering funds for rail projects in other regions along the West Coast.

The proposed capacity improvements would include a total investment of \$3.4 billion in Southern California: \$1.2 billion for railroad infrastructure projects and approximately \$2.2 billion in grade separation projects.

### ■ Maglev System

The Intra-Regional High Speed Rail System, using magnetic levitation (Maglev) technology, would ultimately facilitate the development of a regional airport system, and connect to major activity and multi-modal transportation centers in Los Angeles, Riverside, San Bernardino, and Orange Counties. Without a regional airport in El Toro, the Region needs to further decentralize its future growth in air passenger traffic and air cargo to regional airports in the northern, eastern and southern portions of the Region. Therefore, the Maglev system becomes more important and critical to the success of SCAG's decentralized regional aviation system.

The proposed system will be deployed through a public-private partnership. Its costs, estimated at \$29.4 billion, will be funded through bonds and loans to be repaid through the project-generated revenues. It is anticipated that no operating subsidies will be required.

### ■ Aviation

DESTINATION 2030 proposes a new decentralized aviation plan called the 'Regional Aviation Plan.' This Plan would accommodate a total regional passenger aviation demand of 170 million annual passengers (MAP). Under the Regional Aviation Plan, rather than relying on expanding existing urban airports, the future demand for air travel will be largely served by using available capacity at airfields located in the Inland Empire and north Los Angeles County, where projected population growth will be best served. This plan calls for constraining the LAX at 78 MAP, increasing the Ontario International Airport to 30 MAP, and a new passenger airport at Palmdale that will accommodate 12.8 MAP.



Cooperation between airport authorities is necessary to ensure efficient usage of capacity. Cooperation between airports would be accomplished through the integration of airport master plans, and the development of memoranda of understanding and contractual agreements between airports. These agreements would also identify complementary roles and market niches between airports to increase synergy in the system and maximize utilization of available airport capacities throughout the Region. For example, Los Angeles World Airports (LAWA) would play a key role in integrating master plans for the three airports it operates, namely LAX, Ontario and Palmdale.

### **Ground Access**

The recommended aviation strategy will have localized ground access impacts at a number of airports. Particularly, the Regional Aviation Plan will result in dramatic increases in airport activities (people as well as cargo) at Ontario, Palmdale and a number of other airports. A number of freeway and arterial improvements and transit strategies are proposed in the Plan to address the ground access issues as part of the overall transportation investment in the Region. Specific ground access improvements proposed in the Plan are identified in the Technical Appendix to the RTP.

## **■ Transportation Finance: Meeting Our Needs**

Critical and integral to this Plan is the development of a funding strategy that will result in additional funding over and beyond the baseline funds identified earlier. The development of the funding strategy is based on a set of guiding principles adopted by the Highway and Finance Task Force. These principles are:

- ❖ Maximize available resources
- ❖ Ensure revenue is adequate to maintain air quality conformity
- ❖ Enhance regional and local choice in the selection of projects for funding
- ❖ Identify revenue sources that are reasonable and consistent with current funding practices and long-term trends in transportation finance

Within the framework of these principles, the Highway and Transportation Finance Task Force, along with various other SCAG committees, engaged in extensive debates concerning the adequacy and feasibility of various revenue options available to respond to the SCAG Region's funding shortfall. On the basis of the Task Force's actions and policy direction, the following funding strategies for the 2004 RTP were developed:



## Funding Strategies

- ❖ Protect and strengthen existing transportation revenues, specifically Proposition 42
- ❖ Continue or impose local transportation sales taxes where necessary and support the amendment of the State Constitution to allow 55 percent voter approval for local transportation sales taxes
- ❖ Maximize motor vehicle fuel user-fee revenue through pay-as-you-go and debt financing (assuming an adjustment to the motor vehicle fuel excise tax rate to maintain historical purchasing power)
- ❖ Review methods for collecting revenues from alternative fuel vehicles

In addition to these strategies, currently, the San Bernardino Associated Governments (SANBAG) is considering the feasibility of a development mitigation fee program in addition to the County's Measure I renewal program (sales tax extension program). Initial revenue estimates for some approaches identified for further analyses indicate that about \$1.5 billion could be generated for arterials and interchanges in San Bernardino County.

The Plan also proposes public-private partnership arrangements incorporating user fees to support a number of region-wide initiatives including the Maglev system and major corridor enhancements.

In total, the baseline revenue along with the new public and private funding strategies generates \$213 billion for the 2004 RTP. Approximately \$151 billion is generated from public sources (existing, renewal, and increase initiatives) and about \$62 billion is derived from private/other funding sources.

## ■ System Performance

DESTINATION 2030 is one of the best performing plans that SCAG has ever developed. The preferred strategy of the Plan demonstrates superior performance over the Baseline, or No-Project option, for every single performance criterion, including mobility, accessibility, reliability, safety and the environment. The performance is the result of the proposed growth vision and well-targeted investment strategy that complement growth. The Plan, if fully implemented, will result in maintaining average freeway speed and delay per capita at almost current levels (Base Year 2000) in 2030 despite the population growth. In terms of cost-effectiveness, every dollar invested in the Plan will yield \$3.25 in benefit. The preliminary regional emissions analysis has produced a positive conformity finding for the Region.



## Conclusion

DESTINATION 2030 provides a comprehensive and multi-modal regional transportation Plan that is responsive to public input, local government input, and county transportation commission input. The Plan meets the State and federal requirements and it reflects a vision for the Region that balances land-use with transportation investments in a way that is complementary to existing investments. In addition, the RTP addresses the goals and objectives established by SCAG and is assessed based upon a number of key performance measures. In light of significant funding issues within the Region over the duration of the Plan, innovative funding concepts have been developed that would enable the Region to invest in programs and projects that will meet the Region's transportation needs over the next 27 years. The collaboration needed to develop a consensus on DESTINATION 2030 was unprecedented and reflects the growing realization that we must better integrate transportation and land-use planning in ways that reflect public desires for maintaining the high quality of life that Southern Californians expect and deserve.

